

American Journal of Physiology: Renal Physiology

No. 1. JULY 1998

Neuropeptide Y shifts equilibrium between α - and β -adrenergic tonus in proximal tubule cells <i>U. Holtbäck, Y. Ohtomo, P. Förberg, B. Sahlgren, and A. Aperia</i>	F1
Vascular and glomerular expression of endothelin-1 in normal human kidney <i>W. H. Herman, S. N. Emancipator, R. L. P. Rhoten, and M. S. Simonson</i>	F8
Dietary salt enhances glomerular endothelial nitric oxide synthase through TGF- β 1 <i>W.-Z. Ying and P. W. Sanders</i>	F18
Expression of a hypotonic swelling-activated Cl ⁻ conductance during ontogeny of collecting duct epithelium <i>S. M. Huber and M. F. Horster</i>	F25
Effect of norepinephrine on intracellular pH in kidney proximal tubule: role of Na ⁺ -(HCO ₃) ₂ cotransport <i>S. Abdulnour-Nakhoul, R. N. Khuri, and N. L. Nakhoul</i>	F33
Effect of dietary salt on neuronal nitric oxide synthase in the inner medullary collecting duct <i>A. Roczniaik, J. Zimpelmann, and K. D. Burns</i>	F46
Effects of dietary salt on adrenomedullin and its receptor mRNAs in rat kidney <i>B. L. Jensen, S. Gambaryan, E. Schmaus, and A. Kurtz</i>	F55
Dopamine inhibits vasopressin-dependent cAMP production in the rat cortical collecting duct <i>L. Li and J. A. Schafer</i>	F62
Renal handling of circulating nitrates in anesthetized dogs <i>M. Godfrey and D. S. A. Majid</i>	F68
Endogenous angiotensin II modulates rat proximal tubule transport with acute changes in extracellular volume <i>A. Quan and M. Baum</i>	F74
Immunolocalization of sat-1 sulfate/oxalate/bicarbonate anion exchanger in the rat kidney <i>L. P. Karniski, M. Lötscher, M. Fucentese, H. Hilfiker, Jürg Biber, and H. Murer</i>	F79
Low-salt diet downregulates plasma but not tissue kallikrein-kinin system <i>U. Hilgenfeldt, T. Puschner, U. Riester, J. Finsterle, J. Hilgenfeldt, and E. Ritz</i>	F88
Low-NaCl diet increases H-K-ATPase in intercalated cells from rat cortical collecting duct <i>R. B. Silver, H. Choe, and G. Frindt</i>	F94
Activation of purinergic P2Y2 receptors inhibits inducible NO synthase in cultured rat mesangial cells <i>M. G. Mohaupt, T. Fischer, J. Schwöbel, R. B. Sterzel, and E. Schulze-Lohoff</i>	F103
Expression of multiple α -adrenoceptor isoforms in rat CCD <i>T. W. Wilborn, D. Sun, and J. A. Schafer</i>	F111
Ligand-dependent regulation of NPR-A gene expression in inner medullary collecting duct cells <i>L. Cao, S. C. Chen, T. Cheng, M. H. Humphreys, and D. G. Gardner</i>	F119
Dynamic autoregulation in the in vitro perfused hydronephrotic rat kidney <i>W. A. Cupples and R. D. Loutzenhiser</i>	F126
Expression of synaptotagmin VIII in rat kidney <i>B. K. Kishore, J. B. Wade, K. Schorr, T. Inoue, B. Mandon, and M. A. Knepper</i>	F131
Cadmium is more toxic to LLC-PK ₁ cells than to MDCK cells acting on the cadherin-catenin complex <i>L. B. Zimmerhackl, F. Momm, G. Wiegele, and M. Brandis</i>	F143

Chronic renal failure in a mouse model of human adenine phosphoribosyltransferase deficiency

*M. G. Stockelman, J. N. Lorenz, F. N. Smith, G. P. Boivin, A. Sahota,
J. A. Tischfield, and P. J. Stambrook*

F154

Direct visualization of renal vascular morphogenesis in *Flk1* heterozygous mutant mice

B. Robert, P. L. St. John, and D. R. Abrahamson

F164

Activation of kininogen expression during distal nephron differentiation

S. S. El-Dahr, S. Dipp, I. V. Yosipiv, and L. A. Carbini

F173

No. 2. AUGUST 1998

INVITED REVIEW

Phenotypic plasticity in the intercalated cell: the hensin pathway

Q. Al-Awqati, S. Vijayakumar, C. Hikita, J. Chen, and J. Takito

F183

Natriuretic and kaliuretic activities of guanylin and uroguanylin in the isolated perfused rat kidney

*M. C. Fonteles, R. N. Greenberg, H. S. A. Monteiro, M. G. Currie,
and L. R. Forte*

F191

Extracellular Ca^{2+} decreases chloride reabsorption in rat CTAL by inhibiting cAMP pathway

M. C. de Jesus Ferreira and C. Bailly

F198

Modulation of polymyxin B effects on mammalian urinary bladder

J. R. Berg, C. M. Spilker, and S. A. Lewis

F204

Decreased vasopressin-mediated renal water reabsorption in rats with compensated liver cirrhosis

T. E. N. Jonassen, S. Nielsen, S. Christensen, and J. S. Petersen

F216

Adrenergic- and capsaicin-evoked nitric oxide release from urothelium and afferent nerves in urinary bladder

L. A. Birder, G. Apodaca, W. C. de Groat, and A. J. Kanai

F226

Chronic administration of furosemide augments renal weight and glomerular capillary pressure in normal rats

P. H. Lane, L. D. Tyler, and P. G. Schmitz

F230

Cerebrospinal fluid formation and absorption in dehydrated sheep

A. Chodobski, J. Szmydynger-Chodobska, and M. J. McKinley

F235

Differential regulation of ROMK expression in kidney cortex and medulla by aldosterone and potassium

H. Wald, H. Garty, L. G. Palmer, and M. M. Popovtzer

F239

Myeloma light chains are ligands for cubilin (gp280)

*V. Batuman, P. J. Verroust, G. L. Navar, J. H. Kaysen, F. O. Goda,
W. C. Campbell, E. Simon, F. Pontillon, M. Lyles, J. Bruno, and
T. G. Hammond*

F246

Evidence that calgranulin is produced by kidney cells and is an inhibitor of calcium oxalate crystallization

S. N. Pillay, J. R. Asplin, and F. L. Coe

F255

Thromboxane A₂ modulates the fibrinolytic system in glomerular mesangial cells

T. M. Coffman, R. F. Spurney, R. B. Mannon, and R. Levenson

F262

Regulation of expression of type II sodium-phosphate cotransporters by protein kinases A and C

E. D. Lederer, S. S. Sohi, J. M. Mathiesen, and J. B. Klein

F270

An oligonucleotide decoy for transcription factor E2F inhibits mesangial cell proliferation in vitro

*N. Tomita, M. Horiuchi, S. Tomita, G. H. Gibbons, J. Y. S. Kim, D. Baran,
and V. J. Dzau*

F278

Acute effects of vasopressin V₂-receptor antagonist on kidney AQP2 expression and subcellular distribution

*B. Mønster Christensen, D. Marples, U. B. Jensen, J. Frøkiaer,
D. Sheikh-Hamad, M. Knepper, and S. Nielsen*

F285

Cloning, functional characterization, and localization of a rat renal Na^+ -dicarboxylate transporter

T. Sekine, S. H. Cha, M. Hosoyamada, Y. Kanai, N. Watanabe, Y. Furuta,
K. Fukuda, T. Igarashi, and H. Endou

F298

Identification of a novel *cis*-acting element for fibroblast-specific transcription of the *FSP1* gene

H. Okada, T. M. Danoff, A. Fischer, J. M. Lopez-Guisa, F. Strutz,
and E. G. Neilson

F306

ANNOUNCEMENTS

F315

No. 3. SEPTEMBER 1998

BRIEF REVIEWS

Urinary Concentrating Mechanism

Introduction: Recent insights into the urinary concentrating mechanism: from cDNA cloning to modeling renal function

M. A. Hediger and M. A. Knepper

F317

Urea transporters in kidney: molecular analysis and contribution to the urinary concentrating process

H. Tsukaguchi, C. Shayakul, U. V. Berger, and M. A. Hediger

F319

Roles of Na-K-2Cl and Na-Cl cotransporters and ROMK potassium channels in urinary concentrating mechanism

S. C. Hebert

F325

Cellular mechanisms of aquaporin trafficking

D. Brown, T. Katsura, and C. E. Gustafson

F328

Long-term regulation of urinary concentrating capacity

M. A. Knepper

F332

Functional and molecular characterization of luminal and basolateral $\text{Cl}^-/\text{HCO}_3^-$ exchangers of rat thick limbs

D. Eladari, A. Blanchard, F. Leviel, M. Paillard, A. K. Stuart-Tilley,
S. L. Alper, and R.-A. Podevin

F334

Bradykinin stimulates the ERK→Elk-1→Fos/AP-1 pathway in mesangial cells
S. S. El-Dahr, S. Dipp, and W. H. Baricos

F343

$\text{Mg}^{2+}/\text{Ca}^{2+}$ sensing inhibits hormone-stimulated Mg^{2+} uptake in mouse distal convoluted tubule cells

B. W. Bapty, L.-J. Dai, G. Ritchie, L. Canaff, G. N. Hendy, and G. A. Quamme

F353

PMA and staurosporine affect expression of the PCK gene in LLC-PK₁-F⁺ cells
W. Liu, E. Feifel, T. Holcomb, X. Liu, N. Spitaler, G. Gstraunthal, and N. P. Curthoys

F361

Contribution of 20-HETE to the vasodilator actions of nitric oxide in renal arteries
M. Alonso-Galicia, C. W. Sun, J. R. Falck, D. R. Harder, and R. J. Roman

F370

Immunolocalization of the Na^+/H^+ exchanger isoform NHE2 in rat kidney
R. Chambrey, D. G. Warnock, R.-A. Podevin, P. Bruneval, C. Mandet, M.-F. Bélair, J. Bariéty, and M. Paillard

F379

Functional activity of epidermal growth factor receptors in autosomal recessive polycystic kidney disease

W. E. Sweeney, Jr., and E. D. Avner

F387

Neuronal nitric oxide synthase is expressed in principal cell of collecting duct
X. Wang, M. Lu, Y. Gao, A. Papapetropoulos, W. C. Sessa, and W. Wang

F395

Dehydration reverses vasopressin antagonist-induced diuresis and aquaporin-2 downregulation in rats

D. Marples, B. Mønster Christensen, J. Frøkiaer, M. A. Knepper, and S. Nielsen

F400

Neutral endopeptidase inhibition potentiates the natriuretic actions of adrenomedullin <i>O. Lisy, M. Jougasaki, J. A. Schirger, H. H. Chen, P. T. Barclay, and J. C. Burnett, Jr.</i>	F410
Partially active channels produced by PKA site mutation of the cloned renal K ⁺ channel, ROMK2 (kir1.2) <i>G. G. MacGregor, J. Z. Xu, C. M. McNicholas, G. Giebisch, and S. C. Hebert</i>	F415
Endothelin-1-induced mesangial cell contraction involves activation of protein kinase C- α , - δ , and - ϵ <i>J. A. Dlugosz, S. Munk, X. Zhou, and C. I. Whiteside</i>	F423
Expression of HK α_2 protein is increased selectively in renal medulla by chronic hypokalemia <i>J. Codina, J. T. Delmas-Mata, and T. D. DuBose, Jr.</i>	F433
Reflex effects on components of synchronized renal sympathetic nerve activity <i>G. F. DiBona and S. Y. Jones</i>	F441
Urea and NaCl differentially regulate FAK and RAFTK/PYK2 in mIMCD3 renal medullary cells <i>Z. Zhang, H. Avraham, and D. M. Cohen</i>	F447
Peptide YY inhibits vasopressin-stimulated chloride secretion in inner medullary collecting duct cells <i>C. M. Breen, P. J. Mannon, and B. A. Benjamin</i>	F452
Regulation of human mesangial cell collagen expression by transforming growth factor- β 1 <i>A.-C. Poncelet and H. W. Schnaper</i>	F458

No. 4. OCTOBER 1998

INVITED REVIEW

Relevance of extracellular matrix, its receptors, and cell adhesion molecules in mammalian nephrogenesis <i>E. I. Wallner, Q. Yang, D. R. Peterson, J. Wada, and Y. S. Kanwar</i>	F467
-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	------

Hypertonicity activates MAP kinases and inhibits HCO ₃ ⁻ absorption via distinct pathways in thick ascending limb <i>B. A. Watts III, J. F. Di Mari, R. J. Davis, and D. W. Good</i>	F478
Activation of H ⁺ -ATPase by hypotonicity: a novel regulatory mechanism for H ⁺ secretion in IMCD cells <i>H. Amlal, A. Goel, and M. Soleimani</i>	F487
Bradykinin may be involved in neuropeptide Y-induced diuresis, natriuresis, and calciuresis <i>A. Bischoff, W. Rascher, and M. C. Michel</i>	F502
Immunochemical characterization of Na ⁺ /H ⁺ exchanger isoform NHE4 <i>J. H. Pizzonia, D. Biemesderfer, A. K. Abu-Alfa, M.-S. Wu, M. Exner, P. Isenring, P. Igarashi, and P. S. Aronson</i>	F510
Inducible transcriptional activity of bcn-1 element from laminin γ 1-chain gene promoter in renal and nonrenal cells <i>H. Suzuki, O. N. Denisenko, Y. Suzuki, D. S. Schullery, and K. Bomsztyk</i>	F518
Differential expression, abundance, and regulation of Na ⁺ -phosphate cotransporter genes in murine kidney <i>H. S. Tenenhouse, S. Roy, J. Martel, and C. Gauthier</i>	F527
Characterization of angiotensin IV-degrading enzymes and receptors on rat mesangial cells <i>D. Chansel, S. Czekalski, S. Vandermeersch, E. Ruffet, M.-C. Fournié-Zaluski, and R. Ardaillou</i>	F535
Dietary K ⁺ restriction upregulates total and Sch-28080-sensitive bicarbonate absorption in rat tIMCD <i>S. M. Wall, P. Mehta, and T. D. DuBose, Jr.</i>	F543

Cloning, characterization, and gene organization of K-Cl cotransporter from pig and human kidney and <i>C. elegans</i>	E. J. Holtzman, S. Kumar, C. A. Faaland, F. Warner, P. J. Logue, S. J. Erickson, G. Ricken, J. Waldman, S. Kumar, and P. B. Dunham	F550
Redistribution of Na ⁺ /H ⁺ exchanger isoform NHE3 in proximal tubules induced by acute and chronic hypertension	K.-P. Yip, C.-M. Tse, A. A. McDonough, and D. J. Marsh	F565
Effects of antihypertensive drugs on autoregulation of RBF and glomerular capillary pressure in SHR	F. I. Kvam, J. Ofstad, and B. M. Iversen	F576
Inactivation of kinase cascades in mesangial cells grown on collagen type I	T. Miralem and D. M. Templeton	F585
Cyclosporin A increases hypoxia and free radical production in rat kidneys: prevention by dietary glycine	Z. Zhong, G. E. Arteel, H. D. Connor, M. Yin, M. v. Frankenberg, R. F. Stachlewitz, J. A. Raleigh, R. P. Mason, and R. G. Thurman	F595
Cyclooxygenase-2 participates in tubular flow-dependent afferent arteriolar tone: interaction with neuronal NOS	A. Ichihara, J. D. Imig, E. W. Inscho, and L. G. Navar	F605
Selective increase of cyclooxygenase-2 expression in a model of renal ablation	J.-L. Wang, H.-F. Cheng, M.-Z. Zhang, J. A. McKenna, and R. C. Harris	F613

No. 5. NOVEMBER 1998

ACUTE RENAL FAILURE FORUM

Acute renal failure. I. Relative importance of proximal vs. distal tubular injury	W. Lieberthal and S. K. Nigam (Editors)	F623
-----------------------------------------------------------------------------------	-----------------------------------------	------

INVITED REVIEW

Isozymes of the Na-K-ATPase: heterogeneity in structure, diversity in function	G. Blanco and R. W. Mercer	F633
--------------------------------------------------------------------------------	----------------------------	------

Chloride currents in primary cultures of rabbit proximal and distal convoluted tubules	I. Rubera, M. Tauc, M. Bidet, C. Poujeol, B. Cuiller, A. Watrin, N. Touret, and P. Poujeol	F651
Inhibitory effect of calyculin A, a Ser/Thr protein phosphatase type I inhibitor, on renin secretion	C. S. Park, M. H. Kim, C. H. Leem, Y. J. Jang, H. W. Kim, H. S. Kim, and Y. S. Hong	F664
Cycles and separations in a model of the renal medulla	S. R. Thomas	F671
Role of superoxide in apoptosis induced by growth factor withdrawal	W. Lieberthal, V. Triaca, J. S. Koh, P. J. Pagano, and J. S. Levine	F691
Transport and regulatory properties of the apical Na-K-2Cl cotransporter of macula densa cells	M. A. Laamarti, P. D. Bell, and J.-Y. Lapointe	F703
Isolation of rat fibrillin-1 cDNA and its relevance in metanephric development	Y. S. Kanwar, K. Ota, Q. Yang, A. Kumar, J. Wada, N. Kashihara, and D. R. Peterson	F710
Reduced AQP1, -2, and -3 levels in kidneys of rats with CRF induced by surgical reduction in renal mass	T.-H. Kwon, J. Frøkjaer, M. A. Knepper, and S. Nielsen	F724
Dopamine D ₄ receptor isoform mRNA and protein are expressed in the rat cortical collecting duct	D. Sun, T. W. Wilborn, and J. A. Schaefer	F742
SNAP-23 in rat kidney: colocalization with aquaporin-2 in collecting duct vesicles	T. Inoue, S. Nielsen, B. Mandon, J. Terris, B. K. Kishore, and M. A. Knepper	F752

Intrarenal and subcellular localization of rat CLC5 <i>V. A. Luyckx, F. O. Goda, D. B. Mount, T. Nishio, A. Hall, S. C. Hebert, T. G. Hammond, and A. S. L. Yu</i>	F761
Expression of Grb7 growth factor receptor signaling protein in kidney development and in adult kidney <i>S. F. Leavey, L. J. Arend, H. Dare, G. R. Dressler, J. P. Briggs, and B. L. Margolis</i>	F770
Dietary lipids regulate β -oxidation enzyme gene expression in the developing rat kidney <i>F. Ouali, F. Djouadi, C. Merlet-Bénichou, and J. Bastin</i>	F777
Protein kinase C regulation of p-glycoprotein-mediated xenobiotic secretion in renal proximal tubule <i>D. S. Miller, C. R. Sussman, and J. L. Renfro</i>	F785
Aquaporin-2 expression in primary cultured rat inner medullary collecting duct cells <i>K. Marie, A. Oksche, and W. Rosenthal</i>	F796
Morphological and functional characterization of a conditionally immortalized collecting tubule cell line <i>M. Takacs-Jarrett, W. E. Sweeney, E. D. Avner, and C. U. Cotton</i>	F802
Renal cortical Na ⁺ -K ⁺ -ATPase activity and abundance is decreased in normal pregnant rats <i>J. Mahaney, C. Felton, D. Taylor, W. Fleming, J. Q. Kong, and C. Baylis</i>	F812
A tyrosine-based signal regulates H-K-ATPase-mediated potassium reabsorption in the kidney <i>T. Wang, N. Courtois-Coutry, G. Giebisch, and M. J. Caplan</i>	F818
Increased decorin mRNA in diabetic mouse kidney and in mesangial and tubular cells cultured in high glucose <i>A. Mogyorosi and F. N. Ziyadeh</i>	F827
PGE ₂ stimulates Mg ²⁺ uptake in mouse distal convoluted tubule cells <i>L-J. Dai, B. Bapty, G. Ritchie, and G. A. Quamme</i>	F833
Chronic metabolic acidosis reversibly inhibits extracellular matrix gene expression in mouse osteoblasts <i>K. K. Frick and D. A. Bushinsky</i>	F840

No. 6 DECEMBER 1998

INVITED REVIEW

Role of nitric oxide in the control of renin secretion <i>A. Kurtz and C. Wagner</i>	F849
-----------------------------------------------------------------------------------------	------

Effects of okadaic acid, calyculin A, and PDBu on state of phosphorylation of rat renal Na ⁺ -K ⁺ -ATPase <i>D. Li, S. X. J. Cheng, G. Fisone, M. J. Caplan, Y. Ohtomo, and A. Aperia</i>	F863
Human renal and systemic hemodynamic, natriuretic, and neurohumoral responses to different doses of L-NAME <i>A. Broere, A. H. van den Meiracker, F. Boomsma, F. H. M. Derkx, A. J. Man in't Veld, and M. A. D. H. Schalekamp</i>	F870
Upregulation of H ⁺ -ATPase in the distal nephron during potassium depletion: structural and functional evidence <i>M. A. Bailey, R. M. Fletcher, D. F. Woodrow, R. J. Unwin, and S. J. Walter</i>	F878
Ultrastructural localization of Na-K-2Cl cotransporter in thick ascending limb and macula densa of rat kidney <i>S. Nielsen, A. B. Maunsbach, C. A. Ecelbarger, and M. A. Knepper</i>	F885
Extracellular matrix-related genes in kidney after ischemic injury: potential role for TGF- β in repair <i>D. P. Basile, D. R. Martin, and M. R. Hammerman</i>	F894

Prostanoid signaling, localization, and expression of IP receptors in rat thick ascending limb cells <i>R. L. Hébert, T. O'Connor, C. Neville, K. D. Burns, O. Laneuville, and L. N. Peterson</i>	F904
Effects of physiological hyperinsulinemia on systemic, renal, and hepatic substrate metabolism <i>C. Meyer, J. Dostou, V. Nadkarni, and J. Gerich</i>	F915
Inhibition of adenosine-1 receptor-mediated preglomerular vasoconstriction in AT _{1A} receptor-deficient mice <i>T. Traynor, T. Yang, Y. G. Huang, L. Arend, M. I. Oliverio, T. Coffman, J. P. Briggs, and J. Schnermann</i>	F922
Kid-1 expression is high in differentiated renal proximal tubule cells and suppressed in cyst epithelia <i>R. Witzgall, N. Obermüller, U. Böltitz, J. P. Calvet, B. D. Cowley, Jr., C. Walker, W. Kriz, N. Gretz, and J. V. Bonventre</i>	F928
Regulation of c-ret expression by retinoic acid in rat metanephros: implication in nephron mass control <i>E. Moreau, J. Vilar, M. Lelièvre-Pégrier, C. Merlet-Bénichou, and T. Gilbert</i>	F938
Concerted actions of IL-1 β inhibit Na ⁺ absorption and stimulate anion secretion by IMCD cells <i>R. F. Husted, C. Zhang, and J. B. Stokes</i>	F946
Urinary concentrating function in mice lacking EP ₃ receptors for prostaglandin E ₂ <i>E. F. Fleming, K. Athirakul, M. I. Oliverio, M. Key, J. Goulet, B. H. Koller, and T. M. Coffman</i>	F955
Extracellular ATP causes apoptosis and necrosis of cultured mesangial cells via P2Z/P2X ₇ receptors <i>E. Schulze-Lohoff, C. Hugo, S. Rost, S. Arnold, A. Gruber, B. Brüne, and R. B. Sterzel</i>	F962
pH-dependent modulation of the cloned renal K ⁺ channel, ROMK <i>C. M. McNicholas, G. G. MacGregor, L. D. Islas, Y. Yang, S. C. Hebert and G. Giebisch</i>	F972
Adaptation of the outer medullary collecting duct to metabolic acidosis in vitro <i>S. Tsuruoka and G. J. Schwartz</i>	F982
Isolated superfused juxtaglomerular cells from rat kidney: a model for study of renin secretion <i>M. Albinus, E. Finkbeiner, B. Sosath, and H. Osswald</i>	F991

SPECIAL COMMUNICATION

Regulation of sodium transport in M-1 cells <i>N. L. Nakhoul, K. S. Hering-Smith, C. T. Gambala, and L. L. Hamm</i>	F998
------------------------------------------------------------------------------------------------------------------------	------

The Journal no longer publishes print subject and author indexes. Full searchability is available in the online version (<http://www.ajprenal.org>).